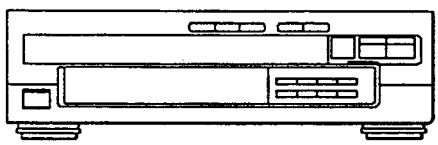
aiwa

DX-Z950M
DX-Z7000M

SERVICE MANUAL



COMPACT DISC PLAYER

• BASIC CD MECHANISM : KSM – 2101ABM • TYPE.YJ (Z950M) Y (Z7000M)

DX – Z950M, DX – Z7000M is the Compact Disc Players which is connected to below systems.

• Z – 550M	• Z – 850M	• Z – 890M	• Z – D3000M
• Z – 750M	• Z – 860M	• Z – 900M	• Z – D5000M
• Z – 760M	• Z – 880M	• Z – 1000M	• Z – D7000M

[SUPPLEMENT SERVICE MANUAL]

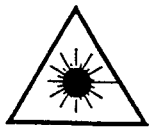
●Only the modifications are stated in this manual.
Use this manual with DX – Z950M Service Manual (S/M code NO.0106).

S/M Code No. 0213 DATE OF ISSUE 2/1993 – T

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion.
  Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1
LASER PRODUCT

LUOKAN 1
LASERLAITE

KLASS 1
LASER APPARAT

SPECIFICATIONS

Disc	Compact disc
Scanning method	Non-contact optical scanner (semiconductor laser application)
Laser	Semiconductor laser (λ = 750-800 nm)
Rotation speed	Approx. 500 rpm – 200 rpm (CLV)
Error correction	Cross Interleave, Reed Solomon code
No. of channels	2 channels
D-A conversion	1-bit DAC
Wow/Flutter	Unmeasurable
Signal to noise ratio	92 dB (1 kHz, 0 dB)
Harmonic distortion	0.01% (1 kHz, 0 dB)
Low pass filter	8 times digital filter + active filter
Power consumption	15 W
Dimensions (W×H×D)	360 × 98.5 × 308 mm (14 1/4 × 4 × 12 1/4 in)
Weight	3.8 kg (8.4 lb)

• Design and specifications are subject to change without notice.

ALTERLATION PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
===IC===		
	82-VM1-601-110	IC, CXP50120-159Q

■ ACCESSORIES/PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	1	★82-VM1-901-218	IB (Y NE)		1
	2	★82-VM1-902-110	IB (Y)		1
	3	★82-VM1-903-119	IB (YJ)		1
	4	★82-VM1-905-018	IB (Z7000M)		1
					1

DISSASEMBLY INSTRUCTIONS

1. "Cabinet, Steel" Removal (See Figure-1)
   1) Remove 5 screws (Ⓐ) and remove "Cabinet, Steel".

2. "Cabinet, Front" Removal (See Figure-1)
   1) Remove 5 screws (Ⓑ× 4, Ⓒ× 1) and remove the "Cabinet, Front".

3. "Panel, Rear" Removal (See Figure-1)
   1) Remove 4 screws (Ⓓ) and remove the "Panel, Rear".

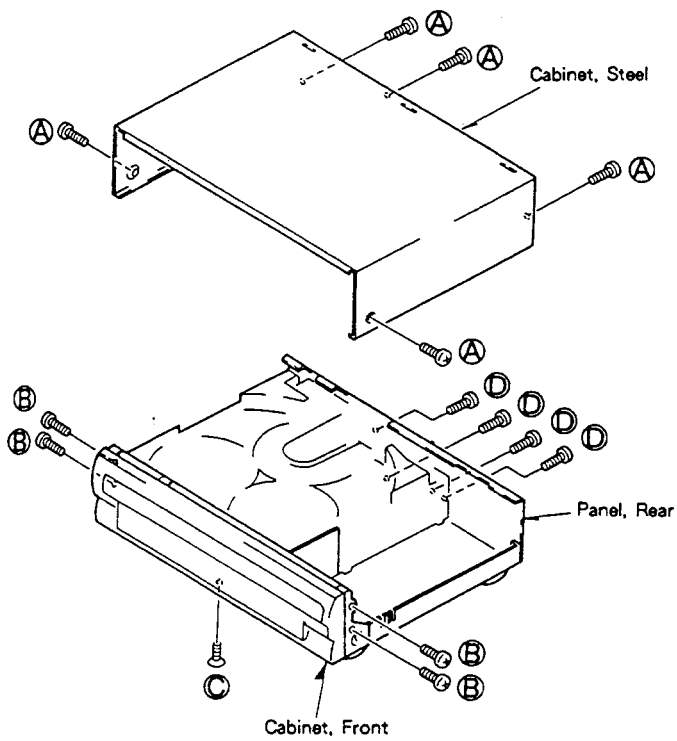


Fig – 1

4. "Mechanism ASSY" Removal (See Figure-2)
   1) Remove 5 screws (Ⓐ) and remove the "Mechanism ASSY".

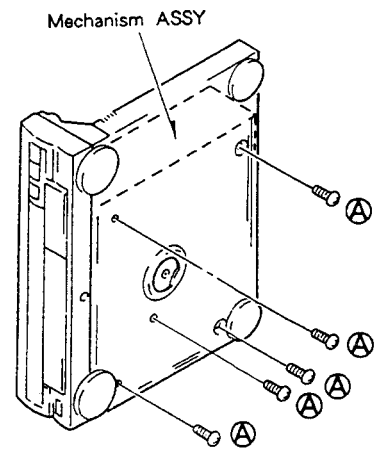


Fig – 2

5. "Main Circuit Board" Removal (See Figure – 3)
   1) Remove 6 hooks unsolder the soldered points and raise the "Main Circuit Board".
   2) Remove 8 connectors and remove the "Main Circuit Board" in the direction of the arrow.

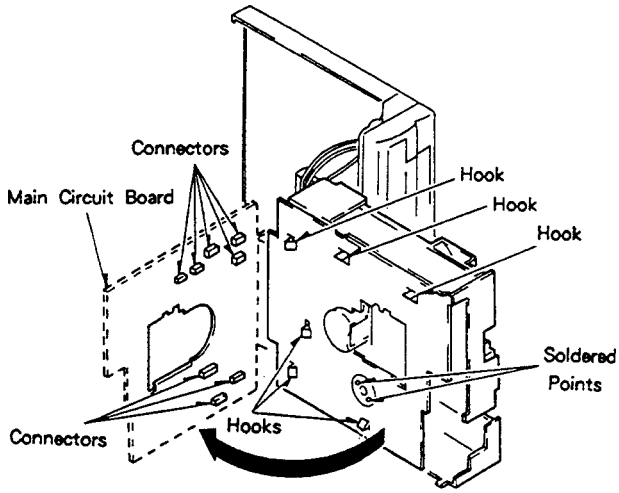


Fig – 3

6. "Tray" Removal (See Figure – 4)
   1) Open the "Tray".
   ★ To open manually
   Turn gear in the direction of arrow ① with your fingers.
   ★To open automatically
   Connect the power supply to the loading motor and open the "Tray".
   2) While pushing the hook in the direction of the arrow ② as shown in the figure, remove the "Tray" in the direction of arrow ③.
   3) Remove screw (Ⓐ) and remove the "Turntable".

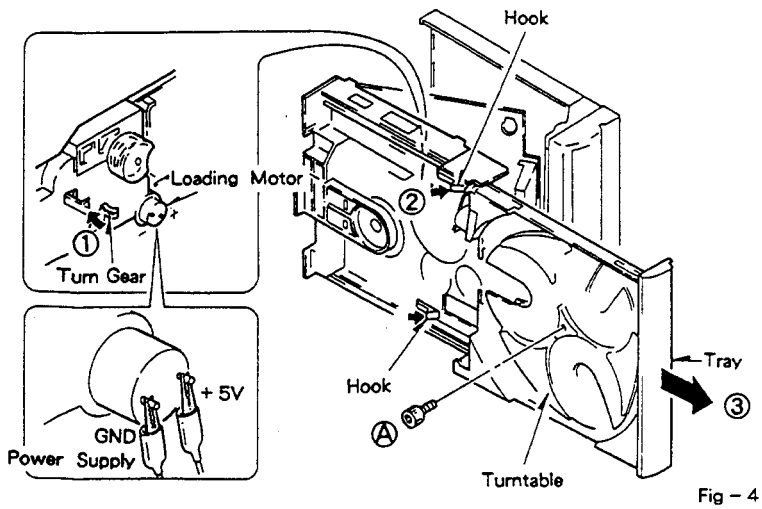
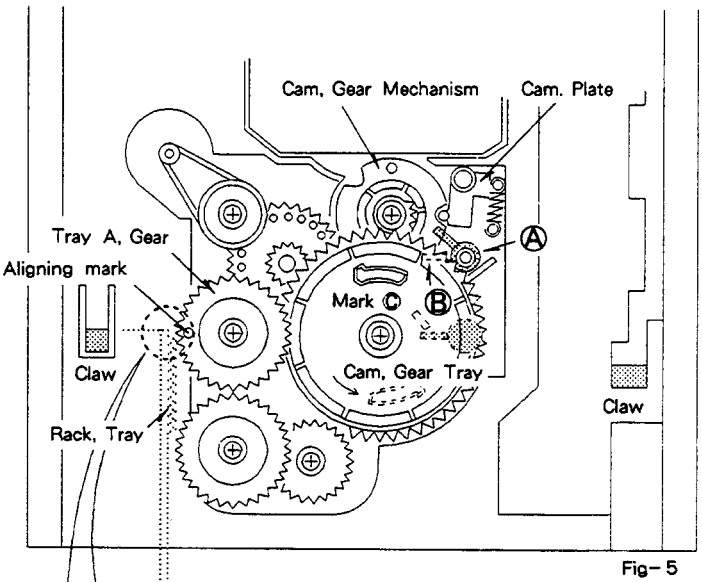


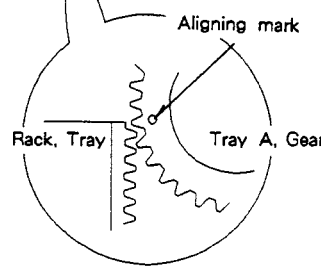
Fig – 4

7. "Tray" and Each Gear Setting (See Figure – 5)
   1) Align the "Cam, Gear Mechanism" and "Cam, Plate" as shown in the figure.
   2) Adjust SW so that it comes to position Ⓐ when performing.
   3) Attach "Cam, Gear Tray" so that mark Ⓒ is positioned as shown in the figure.
   4) Insert "Tray" so that the aligning mark of "Tray A, Gear" is opposite the first tooth of "Rack, Tray".

   Note) If SW is at position Ⓑ (when "Tray" is open.), reset the cams so that SW comes to position Ⓐ.
   If SW is not positioned correctly, "Tray" and chucking do not work well.

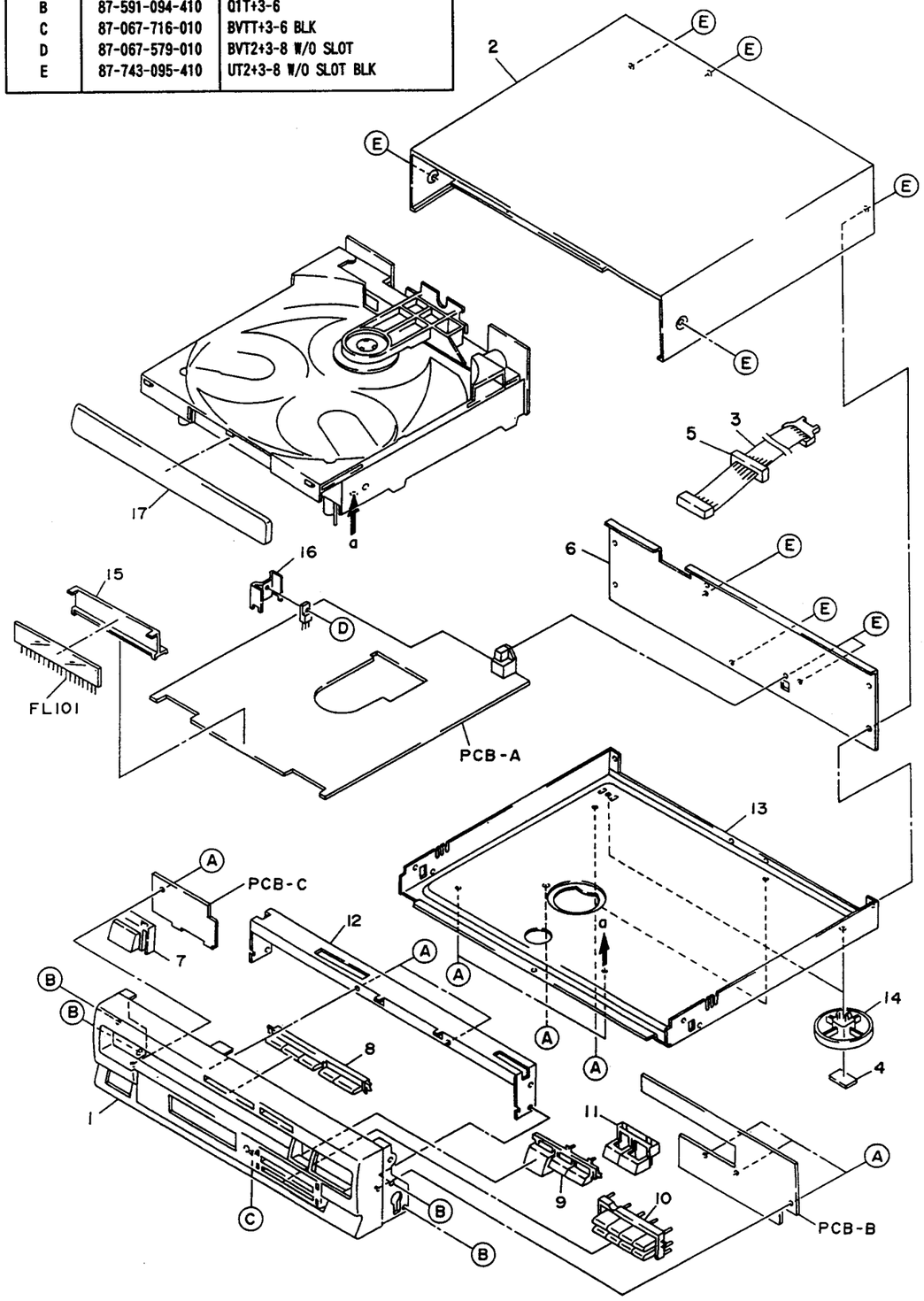


Fig– 5



EXPLODED VIEW – 1

REF. NO.	PART NO.	DESCRIPTION
A	87-067-703-010	BVT2+3-10 W/O SLOT
B	87-591-094-410	Q1T+3-6
C	87-067-716-010	BVTT+3-6 BLK
D	87-067-579-010	BVT2+3-8 W/O SLOT
E	87-743-095-410	UT2+3-8 W/O SLOT BLK



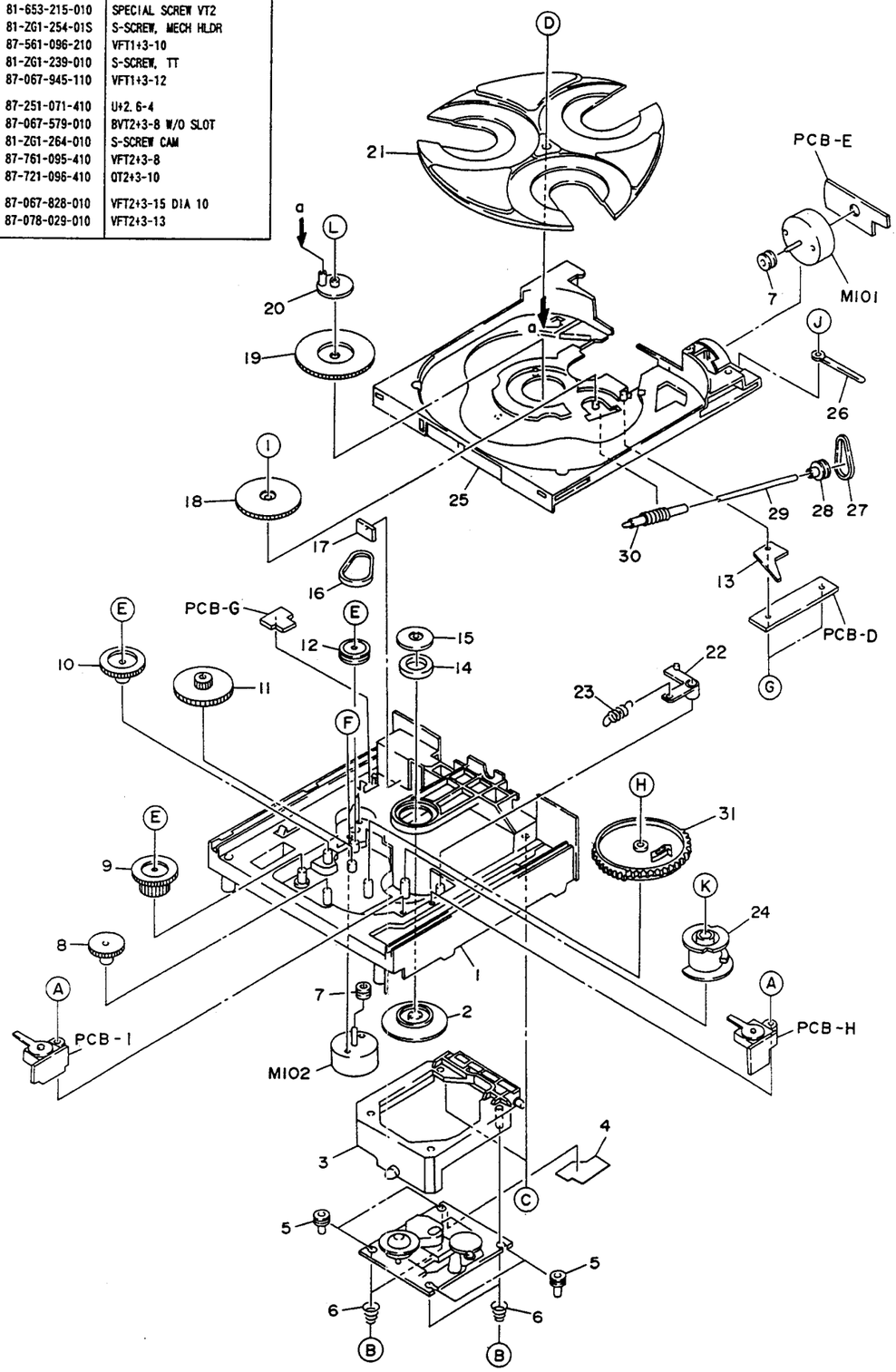
MECHANICAL PARTS LIST

DESCRIPTIONで判断できない物は最終ページの "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	1-1	★09-057-175-010	CAB, FRONT ASSY (Z950M YJ)	※	1
	1-1	★09-057-185-010	CAB, FRONT ASSY (Z7000M)	※	1
	1-2	★82-VM1-002-010	CAB, STEEL (Z950M YJ)	※	1
	1-2	★82-VM1-021-018	CAB, STEEL (Z7000M)	※	1
	1-3	★89-VX5-618-010	FLAT CABLE 11P FG		1
	1-4	★81-VW1-201-010	FELT 20 – 15 – 2		2
	1-5	★89-VT5-202-010	BUSHING, CORD		1
	1-6	★82-VM1-013-219	PANEL, REAR YJBN (Z950M YJ)	※	1
	1-6	★82-VM1-027-019	PANEL, REAR YBNE (Z7000M)	※	1
	1-7	★82-VM1-007-010	KEY, POWER	※	1
	1-8	★82-VM1-006-010	KEY, DISC	※	1
	1-9	★82-VM1-005-010	KEY, SEARCH	※	1
	1-10	★82-VM1-008-010	KEY, PRGM	※	1
	1-11	★82-VM1-004-010	KEY, PLAY	※	1
	1-12	---	CHAS, FR		1
	1-13	---	CHAS, MAIN		1
	1-14	★81-VX1-012-019	FOOT, REAR		2
	1-15	★81-VM1-203-010	GUIDE, FL		1
	1-16	---	HT – SINK		1
	1-17	★82-VM1-010-010	PANEL, TRAY	※	1

EXPLODED VIEW – 2

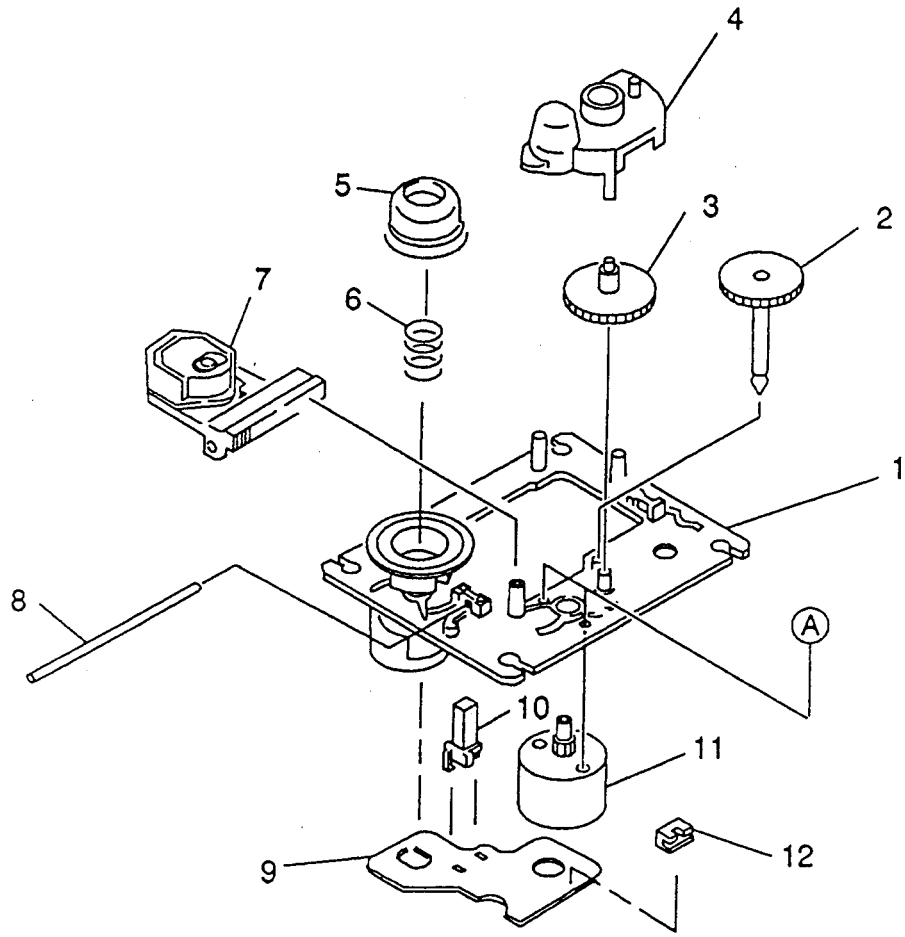
REF.	PART NO.	DESCRIPTION
A	81-653-215-010	SPECIAL SCREW VT2
B	81-ZG1-254-01S	S-SCREW, MECH HLDR
C	87-561-096-210	VFT1+3-10
D	81-ZG1-239-010	S-SCREW, TT
E	87-067-945-110	VFT1+3-12
F	87-251-071-410	U+2.6-4
G	87-067-579-010	BVT2+3-8 W/O SLOT
H	81-ZG1-264-010	S-SCREW CAM
I	87-761-095-410	VFT2+3-8
J	87-721-096-410	OT2+3-10
K	87-067-828-010	VFT2+3-15 DIA 10
L	87-078-029-010	VFT2+3-13



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
	2-1	★81-ZG1-243-119	CHAS, MECH NO2		1
	2-2	★81-ZG1-228-010	HLDR, MAGNET		1
	2-3	★81-ZG1-253-01S	HLDR MECH MK2		1
	2-4	★81-ZG1-241-010	SH, CD MECH		1
	2-5	★81-ZG1-230-010	G – CUSH, MECH		4
	2-6	★81-ZG1-231-010	SPR – C, MECH		4
	2-7	★81-ZG1-212-010	PULLY, LOAD MO		2
	2-8	★81-ZG1-250-019	GEAR, TRAY RELAY MK2		1
	2-9	★81-ZG1-257-019	GEAR, TRAY B MK2		1
	2-10	★81-ZG1-256-019	GEAR, TRAY A MK2		1
	2-11	★81-ZG1-251-019	GEAR, RELAY MK2		1
	2-12	★81-ZG1-211-010	PULLEY, RELAY		1
	2-13	★81-ZG1-240-010	SPR – P, WORM		1
	2-14	★86-531-219-010	MAGNET, CLAMPER		1
	2-15	★81-ZG1-255-01S	PLATE, MAGNET MK2		1
	2-16	★81-ZG1-232-010	BELT, TRAY		1
	2-17	★81-ZG1-238-010	CUSH, TRAY IN		1
	2-18	★81-ZG1-222-010	WORM WHEEL, TT		1
	2-19	★81-ZG1-202-010	GEAR, MAIN		1
	2-20	★81-ZG1-252-010	LEVER, TT MK2		1
	2-21	★81-ZG1-008-119	TURNTABLE, NO2		1
	2-22	★81-ZG1-213-010	PLATE, CAM		1
	2-23	★81-ZG1-235-010	SPR – E CAM		1
	2-24	★81-ZG1-206-010	GEAR, MECH CAM		1
	2-25	★81-ZG1-011-019	TRAY, MK2		1
	2-26	★87-038-039-010	WIRE BINDER		1
	2-27	★81-ZG1-233-110	BELT, TT		1
	2-28	★81-ZG1-236-010	PULLEY, TT MO		1
	2-29	★81-ZG1-260-019	SHAFT, WORM S		1
	2-30	★81-ZG1-221-010	WORM GEAR, TT		1
	2-31	★81-ZG1-205-110	GEAR, TRAY CAM		1

EXPLODED VIEW – 3

REF. NO.	PART NO.	DESCRIPTION
A	87-261-032-210	V+2-3



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	3-1	★9X-262-513-310	TT CHASSIS ASSY (W/MOTOR)		1
	3-2	★92-625-188-020	GEAR, A		1
	3-3	---	GEAR, B		1
	3-4	★92-625-544-010	COVER		1
	3-5	92-625-187-010	RING, CENTER		1
	3-6	★92-625-191-010	SPRING, COMPRESSION		1
	3-7	98-848-127-110	PICK UP KSS-210A		1
	3-8	★94-917-565-010	SHAFT, SLED		1
	3-9	---	MOTOR PWB		1
	3-10	91-572-085-110	SWITCH, LEAF (LIMIT)		1
	3-11	★9X-262-513-210	SLED MOTOR ASSY		1
	3-12	★91-564-722-110	CONNECTOR 6P		1

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
ECM	ECM
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
ｻｰｼﾞｻﾌﾟﾚｯｻ	SERGESUPPRESSOR
ｾﾗｺﾝ	CAP, CERA

サービス技術ニュース	
番号	連絡内容
G－ －	
G－ －	
G－ －	

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BAT, CONTACT ASSY	BATTERY CONTACT ASSY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CHAS, FR	CHASSIS, FRONT
CHAS, MECHA	CHASSIS, MECHANISM
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
KNOB, VOL REV	KNOB, VOLUME REV
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTORL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOADING MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP, SCREW BAT	SPECIAL SCREW BATTERY
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
SW	SWITCH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ｼｬﾌｱｰﾑ	ARM, SHAFT
ｼｬﾌｶﾞｲﾄﾞ	GUIDE, SHAFT
ｽﾄﾗｯﾌﾟ	STRAP

アイワ株式会社
AIWA CO.,LTD.

〒110 東京都台東区池之端1－2－11　☎03 (3827) 3111 (代表)

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Tokyo Japan
Printed in Japan

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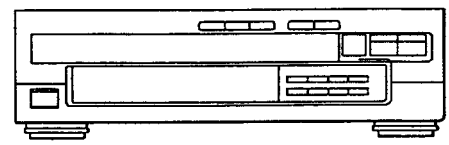
aiwa

DX-Z950M

SERVICE MANUAL



COMPACT DISC PLAYER

• BASIC CD MECHANISM : KSM – 2101ABM • TYPE. Y

◆DX – Z950M are Compact Disc Player connected to below systems.

- XS – Z1000M
- CX – Z1000M
- XS – Z900M
- CX – Z900M
- XS – Z860M
- XS – Z750M
- CX – Z750M

SPECIFICATIONS

Disc	Compact disc
Scanning method	Non-contact optical scanner (semiconductor laser application)
Laser	Semiconductor laser (λ = 750-800 nm)
Rotation speed	Approx. 500 rpm – 200 rpm (CLV)
Error correction	Cross Interleave, Reed Solomon code
No. of channels	2 channels
D-A conversion	1-bit DAC
Wow/Flutter	Unmeasurable
Signal to noise ratio	92 dB (1 kHz, 0 dB)
Harmonic distortion	0.01% (1 kHz, 0 dB)
Low pass filter	8 times digital filter + active filter
Power consumption	15 W
Dimensions (W×H×D)	360 × 98.5 × 308 mm (14 1/4 × 4 × 12 1/4 in)
Weight	3.8 kg (8.4 lb)

• Design and specifications are subject to change without notice.

AIWA CO.,LTD.

Tokyo Japan

Printed in Japan

CAUTIONS WHEN SERVICING

Model DX-Z950M do not have a power circuit. These equipment use a 11-pin flat cable to receive the power supply and to output and input signals.

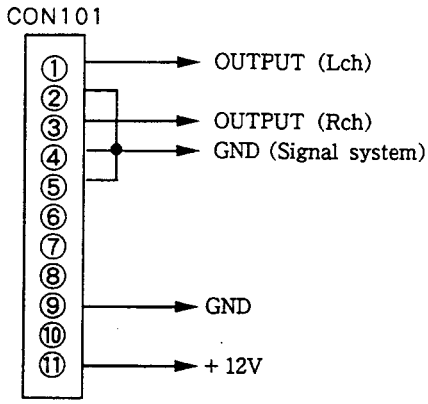
When servicing these equipment, connect them to the devices as shown in Table 1. If the equipment in Table 1 is not available, follow the procedure below.

Table 1

• XS – Z1000M
• CX – Z1000M
• XS – Z900M
• CX – Z900M
• XS – Z860M
• XS – Z750M
• CX – Z750M

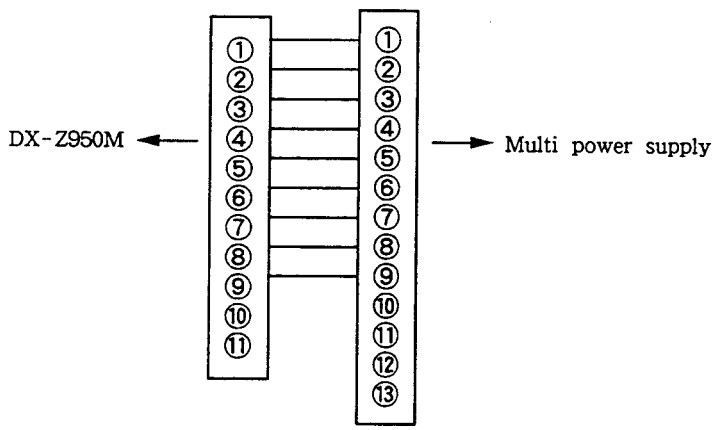
[Repairing a single machine]

① Supply the following voltage to each terminal from the exterminal power supply.

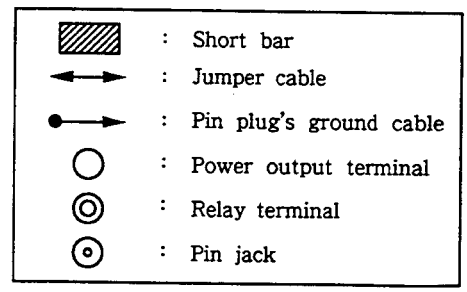


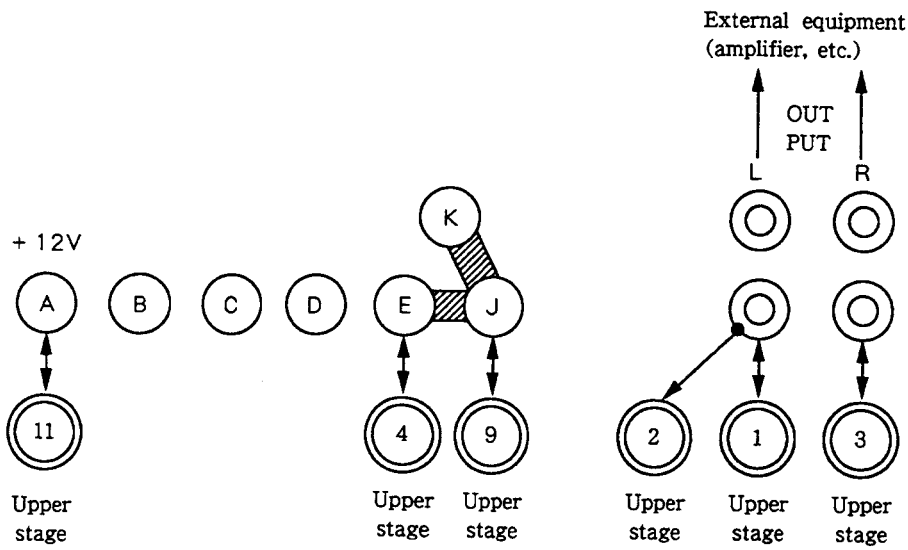
② Multi Power Connection diagram (LPS-9088)

Connect the multi-conversion harness for F550 to the J1 connector.



Connect diagram of multi – conversion harness.





DISSASEMBLY INSTRUCTIONS

1. "Cabinet, Steel" Removal (See Figure-1)
   1) Remove 5 screws (Ⓐ) and remove "Cabinet, Steel".

2. "Cabinet, Front" Removal (See Figure-1)
   1) Remove 5 screws (Ⓑ× 4, Ⓒ× 1) and remove the "Cabinet, Front".

3. "Panel, Rear" Removal (See Figure-1)
   1) Remove 4 screws (Ⓓ) and remove the "Panel, Rear".

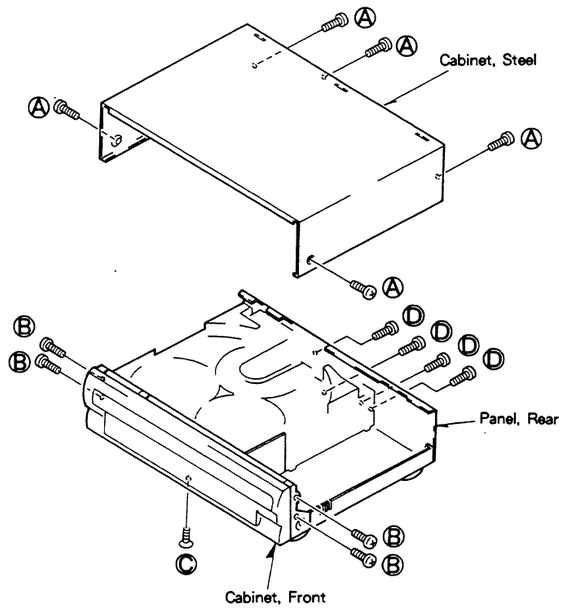


Fig – 1

4. "Mechanism ASSY" Removal (See Figure-2)
   1) Remove 4 screws (Ⓐ) and remove the "Mechanism ASSY".

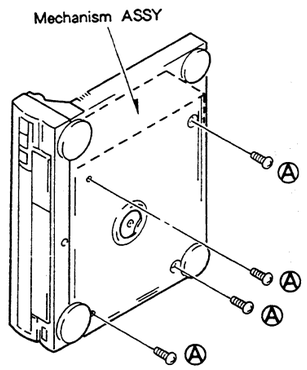


Fig – 2

5. "Main Circuit Board" Removal (See Figure – 3)
   1) Remove 6 hooks unsolder the soldered points and raise the "Main Circuit Board".
   2) Remove 8 connectors and remove the "Main Circuit Board" in the direction of the arrow.

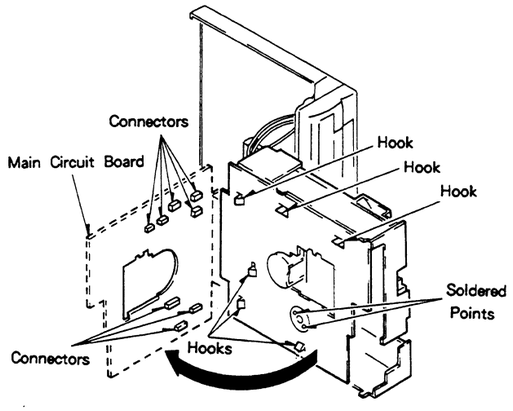


Fig – 3

6. "Tray" Removal (See Figure – 4)
   1) Open the "Tray".
   ★ To open manually
   Turn gear in the direction of arrow ① with your fingers.
   ★ To open automatically
   Connect the power supply to the loading motor and open the "Tray".
   2) While pushing the hook in the direction of the arrow ② as shown in the figure, remove the "Tray" in the direction of arrow ③.
   3) Remove screw (Ⓐ) and remove the "Turntable".

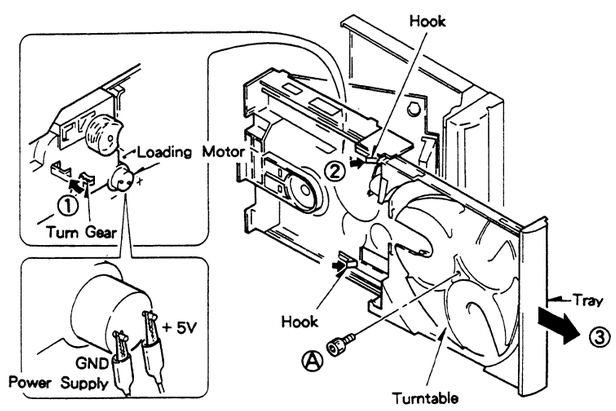
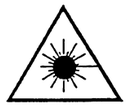


Fig – 4

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion.
  Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1
LASER PRODUCT

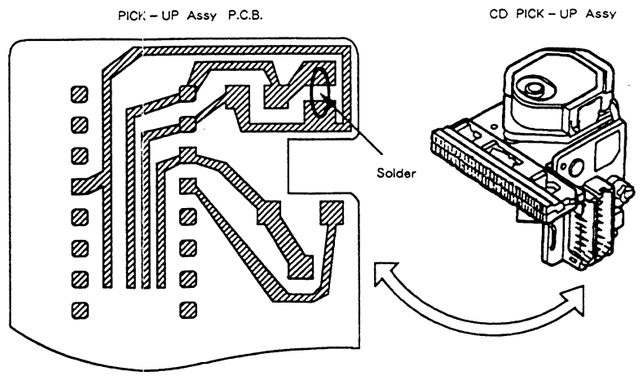
LUOKAN 1
LASERLAITE

KLASS 1
LASER APPARAT

Precaution to replace Optical block (KSS – 210A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.



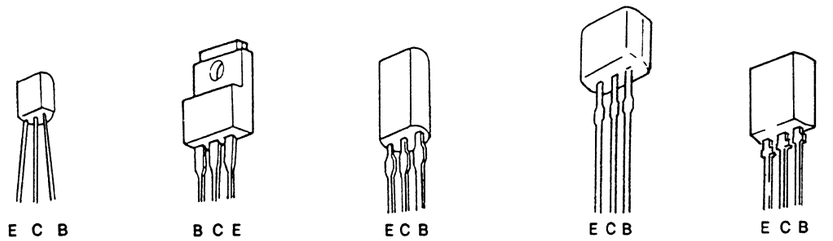
ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
	===IC===	
	87-002-639-010	IC, BA6296FP
	87-001-184-010	IC, CXA1081S
	87-001-400-010	IC, CXA1082S
	87-001-944-010	IC, CXD1167Q
	81-VM1-636-010	IC, CXP50116-392Q
	87-002-211-010	IC, GP1F32T(DIGITAL OUT)
	87-002-394-010	IC, LB1641
	87-002-348-010	IC, NJM4580D
	87-020-881-019	IC, NJM78L05A
	87-002-984-010	IC, TC9237BN
	===TRANSISTOR===	
	89-112-964-019	TRANSISTOR, 2SA1296Y
	89-113-187-019	TRANSISTOR, 2SA1318TU
	89-213-302-019	TRANSISTOR, 2BS1330Q
	89-213-702-019	TRANSISTOR, 2SB1370E
	89-318-155-019	TRANSISTOR, 2SC1815GR
	89-318-154-019	TRANSISTOR, 2SC1815Y
	89-325-002-319	TRANSISTOR, 2SC2500
	89-406-555-019	TRANSISTOR, 2SD655E
	87-026-572-019	TRANSISTOR, DTA114TS
	87-026-486-019	TRANSISTOR, DTA144TS
	87-026-291-019	TRANSISTOR, DTC124XS
	87-026-218-019	TRANSISTOR, DTC144ES
	===DIODE===	
	87-020-870-019	DIODE, 1S1585
	87-020-465-019	DIODE, 1SS133
	87-002-608-019	DIODE, DSF10TC
	87-002-850-019	DIODE, ZENER HZ4B2
	87-027-393-019	DIODE, ZENER HZ4C2
	87-027-652-019	DIODE, ZENER HZ9A1L
	87-027-402-019	DIODE, ZENER HZ24-2L
	===MAIN CIRCUIT BOARD SECTION===	
C101	★87-010-405-019	CAP, ELECT 10-50 SME
C102	★87-010-405-019	CAP, ELECT 10-50 SME
C103	★87-018-127-019	CAP, CERA-SOL SS 470P-50 B
C104	★87-018-127-019	CAP, CERA-SOL SS 470P-50 B
C107	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL
C108	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL
C109	★87-018-117-019	CAP, CERA-SOL SS 68P-50 SL
C110	★87-018-117-019	CAP, CERA-SOL SS 68P-50 SL
C111	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL
C112	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL
C113	★87-010-404-019	CAP, ELECT 4.7-50 SME
C114	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C115	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C116	★87-010-260-019	CAP, ELECT 47-25 SME
C117	★87-010-263-019	CAP, ELECT 100-10
C118	★87-010-263-019	CAP, ELECT 100-10
C119	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL
C120	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL
C121	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C122	★87-010-263-019	CAP, ELECT 100-10
C130	★87-018-209-019	CAP, CERA-SOL SS 0.1-50 F
C201	★87-018-132-019	CAP, CERA-SOL SS 2200P-16 X
C202	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C203	★87-018-202-019	CAP, CERA-SOL SS 6800P-16 X
C207	★87-010-405-019	CAP, ELECT 10-50 SME
C211	★87-018-199-019	CAP, CERA-SOL SS 3300P-16 X
C212	★87-010-403-019	CAP, ELECT 3.3-50 SME
C213	★87-010-382-019	CAP, ELECT 22-25 SME
C216	★87-010-374-019	CAP, ELECT 47-10
C220	★87-018-133-019	CAP, CERA-SOL SS 4700P-16 X
C221	★87-010-401-019	CAP, ELECT 1-50 SME
C222	★87-010-401-019	CAP, ELECT 1-50 SME

REF. NO.	PART NO.	DESCRIPTION
C230	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C231	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C302	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C303	★87-010-400-019	CAP, ELECT 0.47-50 SME
C305	★87-018-132-019	CAP, CERA-SOL SS 2200P-16 X
C307	★87-010-248-019	CAP, ELECT 220-10
C308	★87-010-374-019	CAP, ELECT 47-10
C309	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C310	★87-010-374-019	CAP, ELECT 47-10
C401	★87-010-263-019	CAP, ELECT 100-10
C402	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C404	★87-010-400-019	CAP, ELECT 0.47-50 SME
C405	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C406	★87-018-131-019	CAP, CERA-SOL SS 1000P-50 B
C501	★87-016-113-019	CAP, ELECT 4700-16 VR
C503	★87-018-209-019	CAP, CERA-SOL SS 0.1-50 F
C504	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C505	★87-010-404-019	CAP, ELECT 4.7-50 SME
C506	★87-010-374-019	CAP, ELECT 47-10
C512	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C513	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C516	★87-010-260-019	CAP, ELECT 47-25 SME
C522	★87-010-406-019	CAP, ELECT 22-50 SME
C526	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C527	★87-018-200-019	CAP, CERA-SOL SS 3900P-16 X
C528	★87-010-263-019	CAP, ELECT 100-10
C529	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C531	★87-010-221-019	CAP, ELECT 470-10
C533	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C552	★87-018-209-019	CAP, CERA-SOL SS 0.1-50 F
C556	★87-016-113-010	CAP, ELECT 4700-16 VR
C557	★87-010-381-019	CAP, ELECT 330-16 SME
C559	★87-018-196-019	CAP, CERA-SOL SS 1500P-11
C801	★87-010-263-019	CAP, ELECT 100-10
C802	★87-010-370-019	CAP, ELECT 330-6.3 SME
C803	★87-018-115-019	CAP, CERA-SOL SS 47P-50 SL
C804	★87-018-115-019	CAP, CERA-SOL SS 47P-50 SL
C805	★87-018-115-019	CAP, CERA-SOL SS 47P-50 SL
C806	★87-018-115-019	CAP, CERA-SOL SS 47P SL
C807	★87-018-128-019	CAP, CERA-SOL SS 560P-50 B
C808	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y
C809	★87-018-128-019	CAP, CERA-SOL SS 560P-50 B
C825	★87-010-404-019	CAP, ELECT 4.7-50 SME
C990	★87-018-131-019	CAP, CERA-SOL SS 1000P-50 B
C991	★87-018-131-019	CAP, CERA-SOL SS 1000P-50 B
EMI102	★87-008-372-010	FILTER, EMI BL OIRNI
EMI103	★87-008-372-010	FILTER, EMI BL OIRNI
EMI104	★87-008-372-010	FILTER, EMI BL OIRNI
F101	★87-008-394-019	FILTER, CERAMIC CST 4.19MGW
FC101	★82-VM1-616-010	FLAT CABLE 5-2.0-175
FL101	★81-VM1-637-010	FL, 7BT-171GK(DISPLAY)
J104	87-002-211-010	IC, GP1F32T(DIGITAL OUT)
L301	★87-003-147-019	COIL, 22UH
L401	★87-003-147-019	COIL, 22UH
L502	★87-007-311-010	COIL, OSC DDCON V
L801	★87-003-147-019	COIL, 22UH
M102	87-045-305-010	MOTOR, RF-500TB(LOADING MOTOR)
R410	★87-025-407-019	RES, MF 100K-1/8W
R412	★87-025-407-019	RES, MF 100K-1/8W
⚠R507	★87-029-129-090	RES, FUSE 3.3-1/4W
⚠R522	★87-029-129-090	RES, FUSE 3.3-1/4W
SFR101	★87-024-169-010	SFR, 2.2K DIA6V
SFR103	★87-024-173-010	SFR, 22K DIA6V
SFR301	★87-024-173-010	SFR, 22K DIA6V
SFR302	★87-024-173-010	SFR, 22K DIA6V
X102	★87-030-270-019	XTAL RESONATOR 16.9344MHZ

REF. NO.	PART NO.	DESCRIPTION
	===TACT-1 CIRCUIT BOARD SECTION===	
FC701	★82-VM1-615-010	FLAT CABLE, 3-2.0-160
LED701	89-VW5-606-010	LED, SLH-38MC 70F-90(◀PLAY/PAUSE)
LED702	87-002-816-010	LED, SEL 2415E GRN(⏭)
LED703	89-VW5-606-010	LED, SLH-38MC 70F-90(■STOP/CLEAR)
LED704	87-002-816-010	LED, SEL 2415E GNN(⏮)
SW701	87-036-259-018	SW, TACT SKHI/BB(■STOP/CLEAR))
SW702	87-036-259-018	SW, TACT SKHI/BB(◀PLAY/PAUSE)
SW703	87-036-270-019	SW, TACT 2SKQCAA(⏭)
SW704	87-036-270-019	SW, TACT 2SKQCAA(⏮)
SW706	87-036-259-018	SW, TACT 2KHVBB(RANDOM)
SW707	87-036-259-018	SW, TACT 2KHVBB(PROGRAM)
SW708	87-036-259-018	SW, TACT 2KHVBB(REPEAT)
SW709	87-036-259-018	SW, TACT 2KHVBB(TIMER PROGRAM)
SW710	87-036-259-018	SW, TACT 2KHVBB(DELITE)
SW711	87-036-259-018	SW, TACT 2KHVBB(DISPLAY)
SW712	87-036-259-018	SW, TACT 2KHVBB(EDIT-AI)
SW713	87-036-259-018	SW, TACT 2KHVBB(EDIT-CONT)
SW714	87-036-259-018	SW, TACT 2KHVBB(1)
SW715	87-036-259-018	SW, TACT 2KHVBB(⏏OPEN/CLOSE)
SW716	87-036-259-018	SW, TACT 2KHVBB(DISK CHANGE)
SW717	87-036-259-018	SW, TACT 2KHVBB(DISK CONT, SKIP)
SW718	87-036-259-018	SW, TACT 2KHVBB(3)
SW719	87-036-259-018	SW, TACT 2KHVBB(2)
	===TACT-2 CIRCUIT BOARD SECTION===	
SW705	87-036-259-018	SW, TACT 2KHVBB(POWER)
	===PHOTO CIRCUIT BOARD SECTION===	
PH601	87-026-573-010	P-SENSOR, GP1S53V
	===MOTOR-1 CIRCUIT BOARD SECTION===	
M101	87-045-305-010	MOTOR, RF-500TB(TURN TABLE MOTOR)
	===MOTOR-2 CIRCUIT BOARD SECTION===	
M103	9X-262-513-210	MOTOR GEAR ASSY(SLED)
M104	9X-262-513-310	MOTOR ASSY(W/CHASSIS, T.T)(SPINDLE)
SW101	91-572-085-110	LEAF SW(INSIDE LIMIT)
	===SWITCH-1 CIRCUIT BOARD SECTION===	
SW603	87-036-109-010	PUSH, SW(CLOSE SW)
	===SWITCH-2 CIRCUIT BOARD SECTION===	
SW601	87-036-271-010	LEVER, SW(UP/DOWN SW)
	===SWITCH-3 CIRCUIT BOARD SECTION===	
SW602	87-036-271-010	LEVER, SW(OPEN SW)
	===MISCELLANEOUS===	
	98-848-127-110	OPTICAL PICK UP KSS-210A
	★89-VT5-202-010	BUSHING, CORD
CON101	★89-VX5-618-010	FLAT CABLE 11P FG

TRANSISTOR ILLUSTRATION



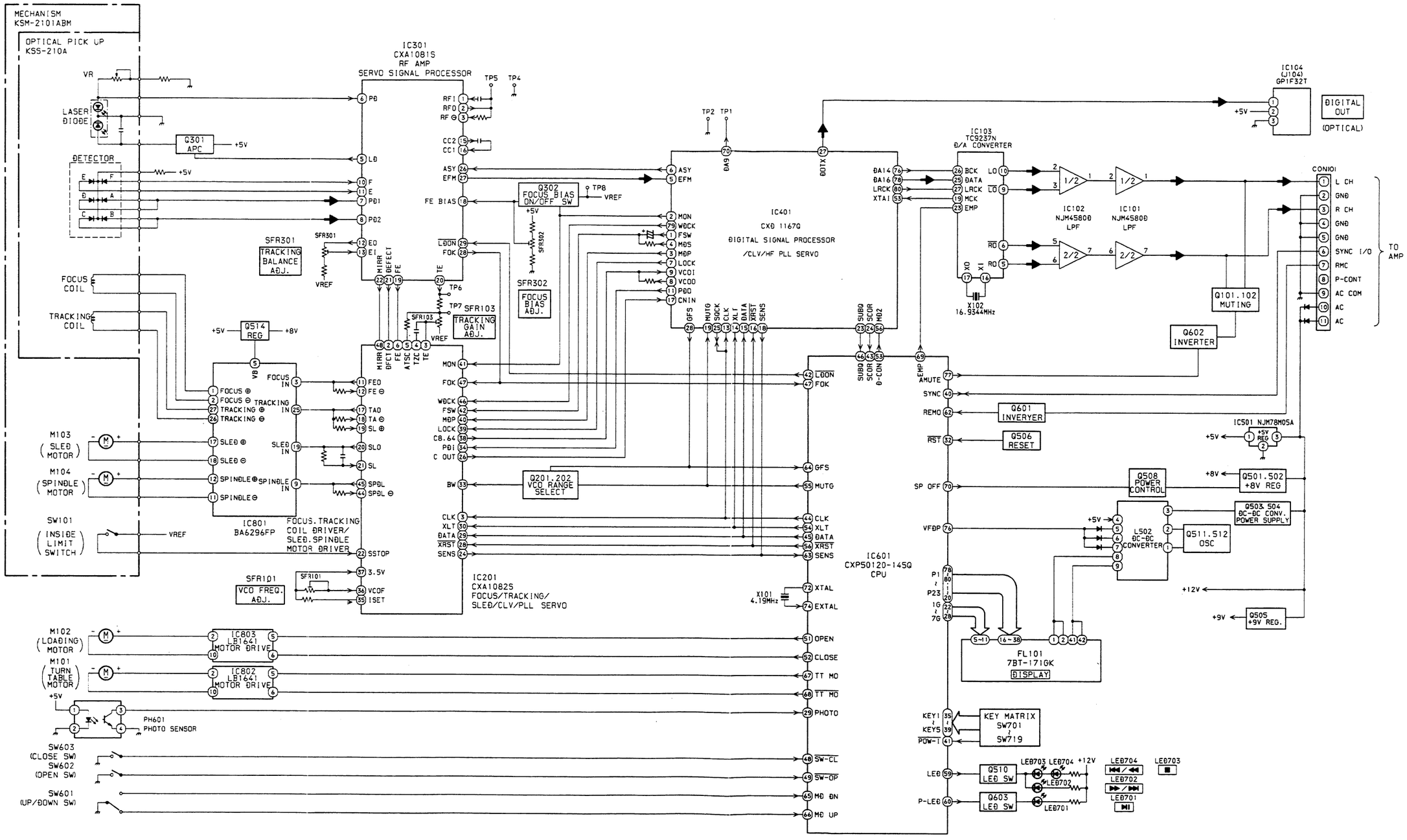
E C B	B C E	E C B	E C B	E C B
2SA1296	2SB1370	2SC2500	DTA114	2SB1330
2SA1318			DTA144	
2SC1815			DTC144	
2SD655			DTC124	

See the DX – N350M for the IC description below		
	DX – N350M	DX – Z950M
①	IC, CXP50120 – 145Q	IC, CXP50120 – 145Q
②	IC, CXD1167Q	IC, CXD1167Q
③	IC, CXA1081S	IC, CXA1081S
④	IC, CXA1082S	IC, CXA1082S
⑤	IC, TC9237N	IC, TC9237N

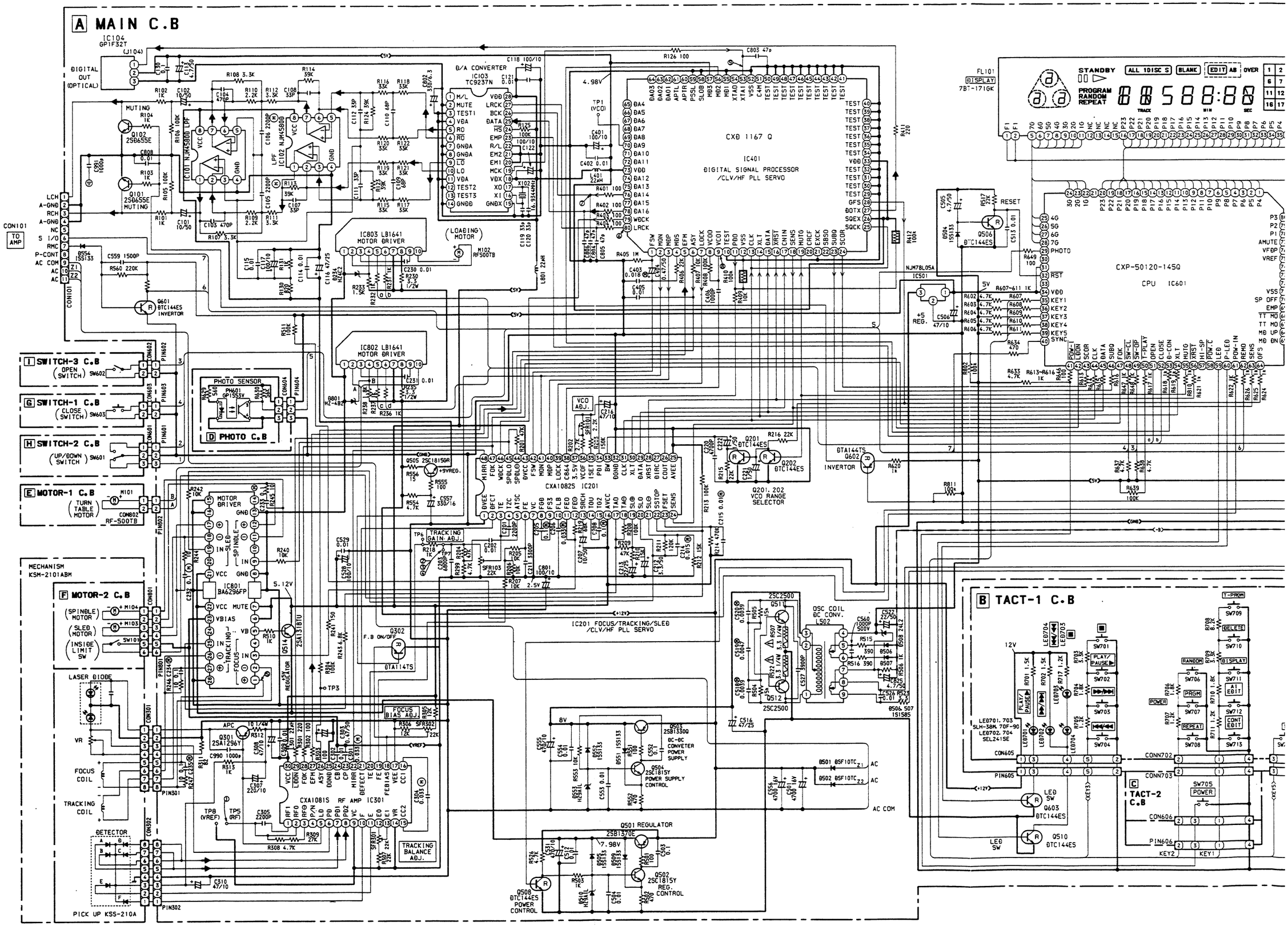
■ ACCESSORIES/PACKAGE LIST

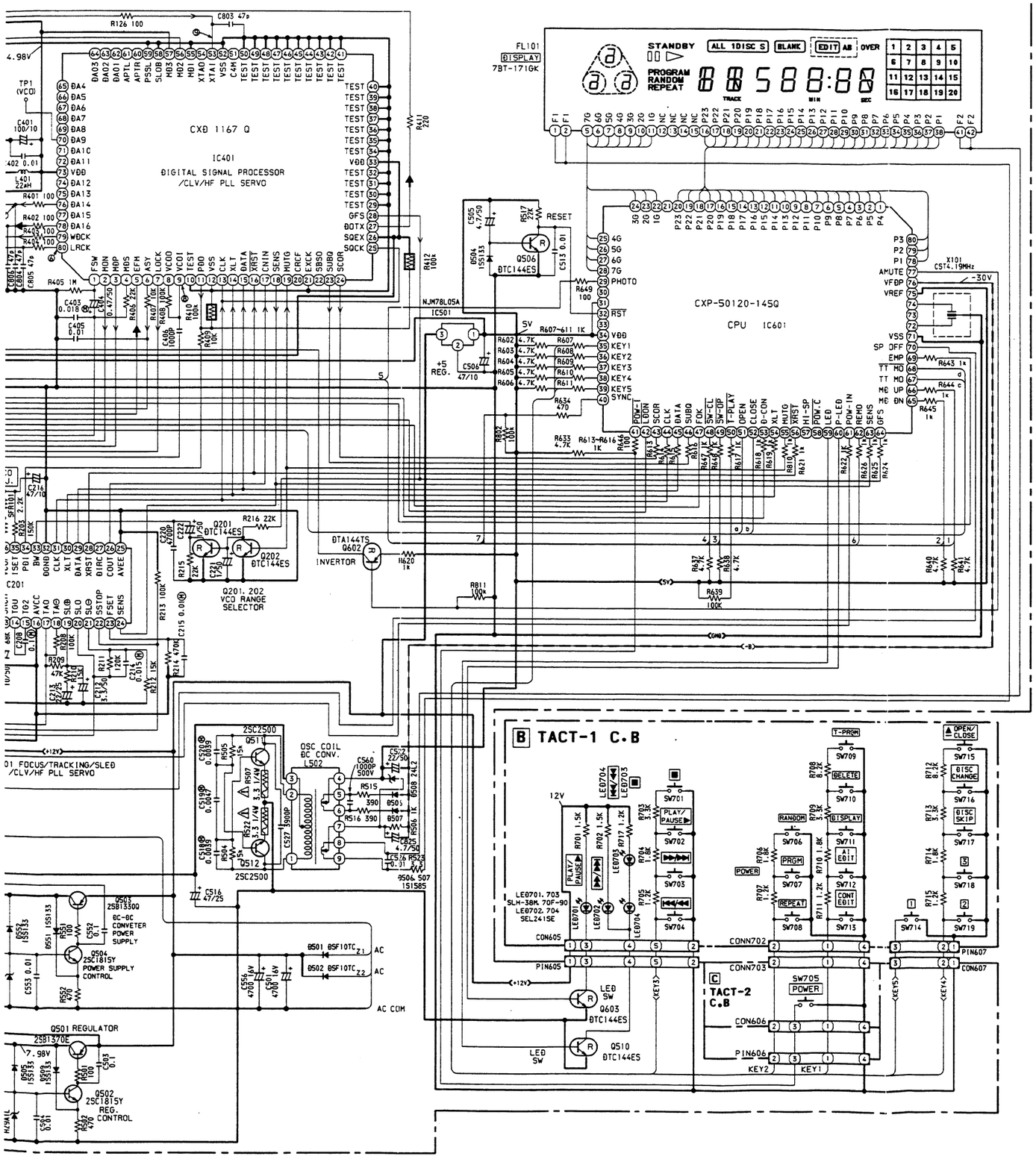
PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	1	★82-VM1-902-010	INSTRUCTION BOOKLET EX	※	1
	2	★87-064-129-010	HOLDER, F – CABLE 682		1

BLOCK DIAGRAM



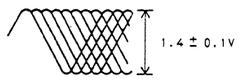
SCHEMATIC DIAGRAM





WAVE FORM

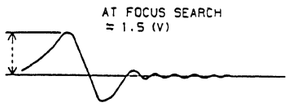
①



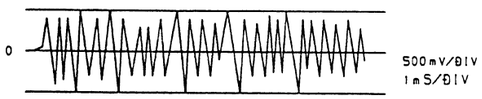
VP-P SHOULD BE APPROX. 1.4X.
WHEN PLAYING TRACK-2 OF YEDS-18.

②

③

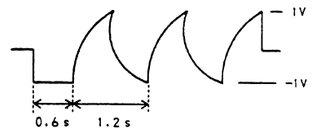


④

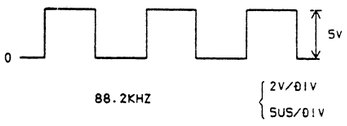


⑤

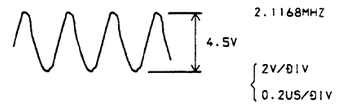
(WHEN VDD ON WITHOUT DISC AND TRAY IS CLOSED.)



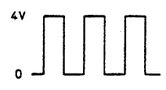
⑥



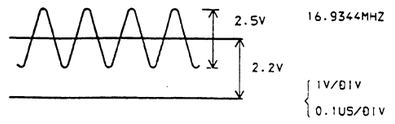
⑦

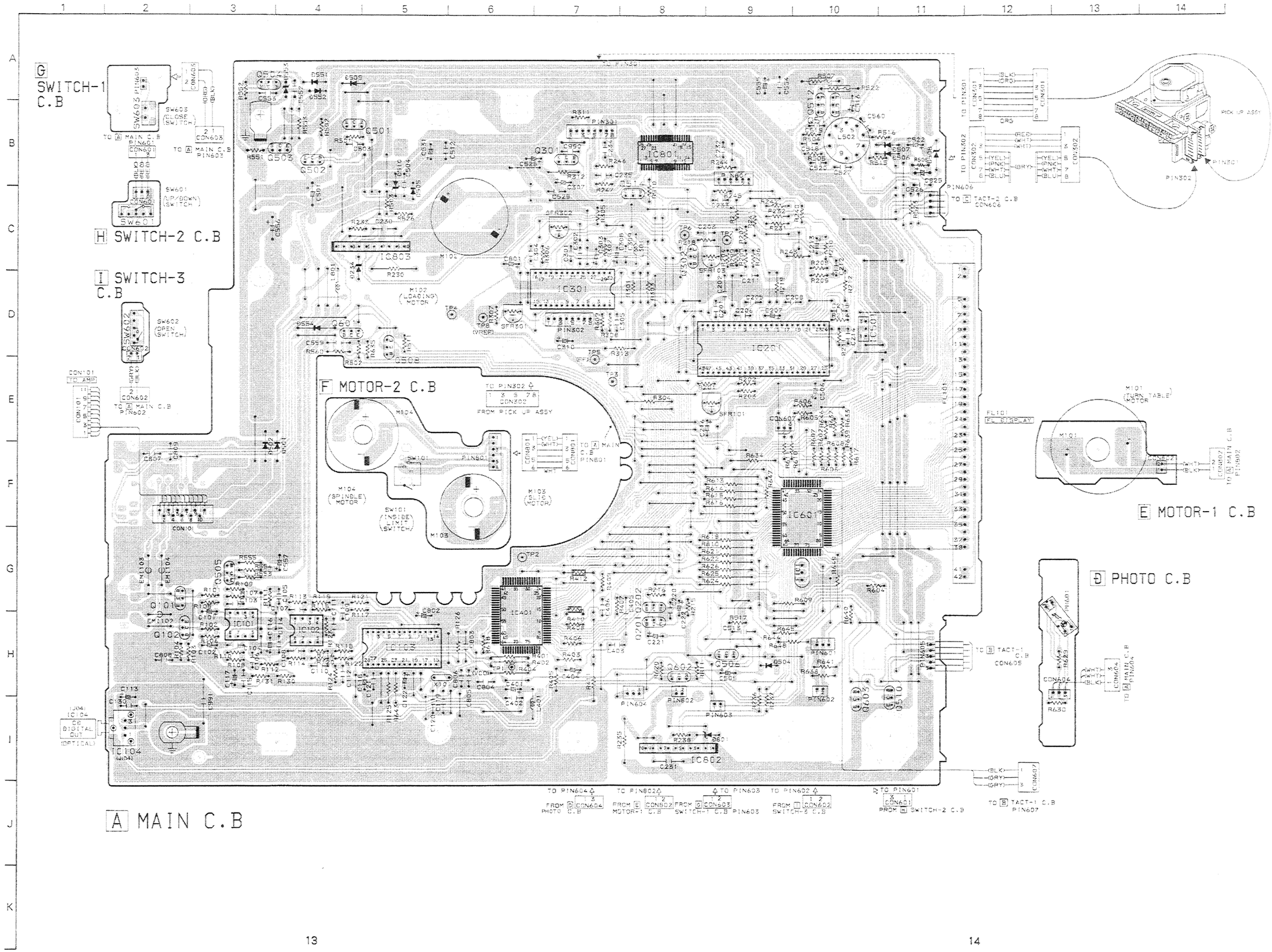


⑧



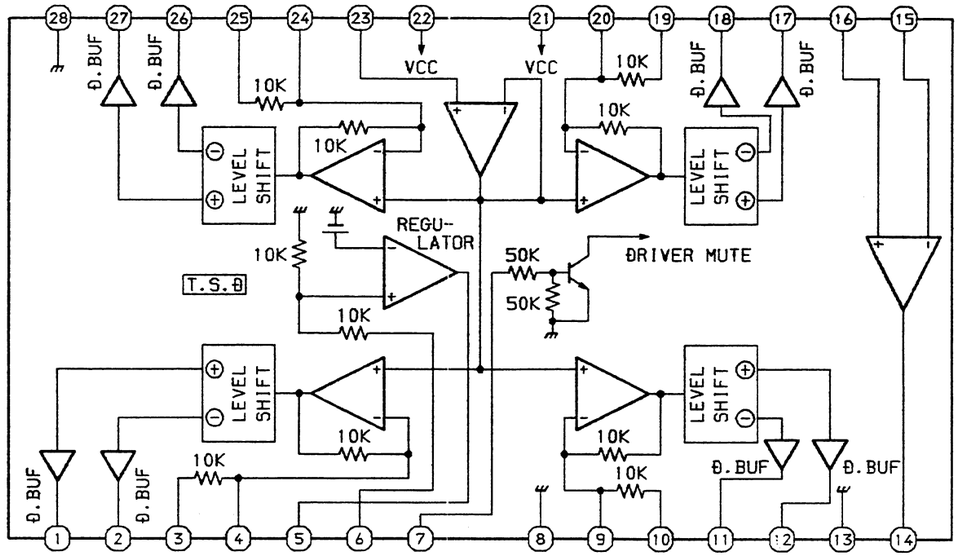
⑨



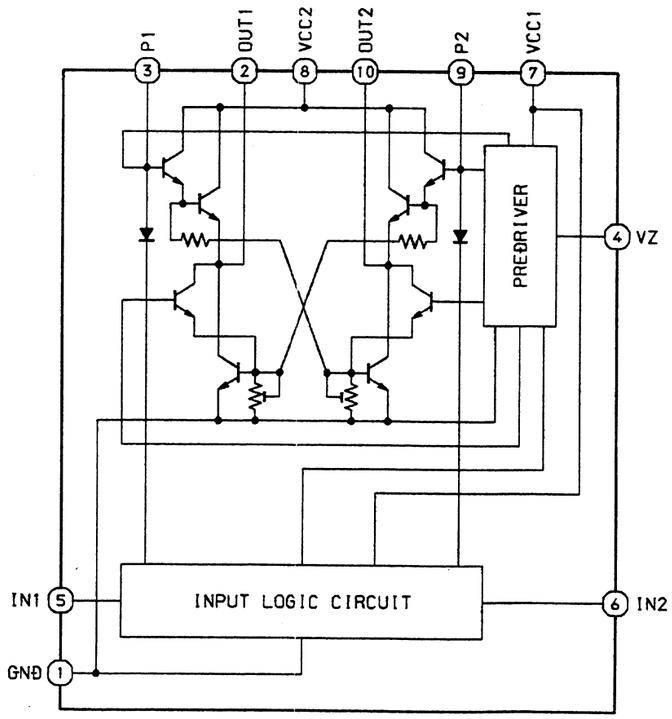

G SWITCH-1 C.B
H SWITCH-2 C.B
I SWITCH-3 C.B
F MOTOR-2 C.B
A MAIN C.B
E MOTOR-1 C.B
D PHOTO C.B
PICK UP ASSY
M101 (TURN TABLE) MOTOR
M102 (LOADING) MOTOR
M104 (SPINDLE) MOTOR
M103 (SLIDE) MOTOR
SW101 (INSIDE) LIMIT (SWITCH)
SW601 (UP/DOWN) (SWITCH)
SW602 (OPEN) (SWITCH)
SW603 (CLOSE) (SWITCH)
IC801
IC301
IC201
IC601
IC602
IC401
IC101
IC102
IC104
IC803
TO PIN302
FROM PICK UP ASSY
TO PIN604
TO PIN603
TO PIN602
TO PIN601
FROM PHOTO C.B
FROM MOTOR-1 C.B
FROM SWITCH-1 C.B PIN603
FROM SWITCH-2 C.B
TO TACT-1 C.B PIN607
TO TACT-2 C.B CON606
TO MAIN C.B PIN601
TO MAIN C.B PIN602
TO MAIN C.B PIN603
TO MAIN C.B PIN604
TO MAIN C.B PIN606
TO MAIN C.B PIN607

IC BLOCK DIAGRAM

IC,BA6296FP

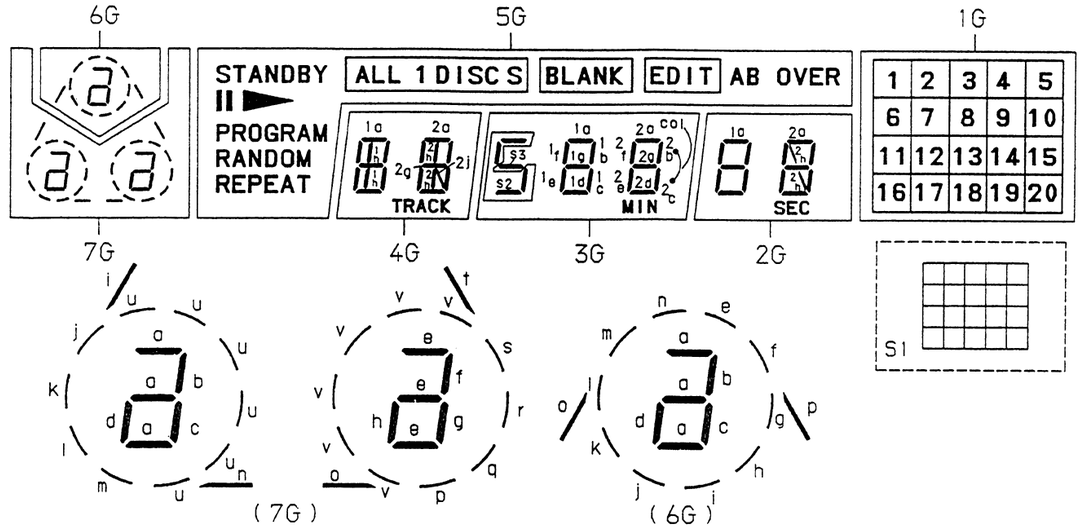


IC,LB1641



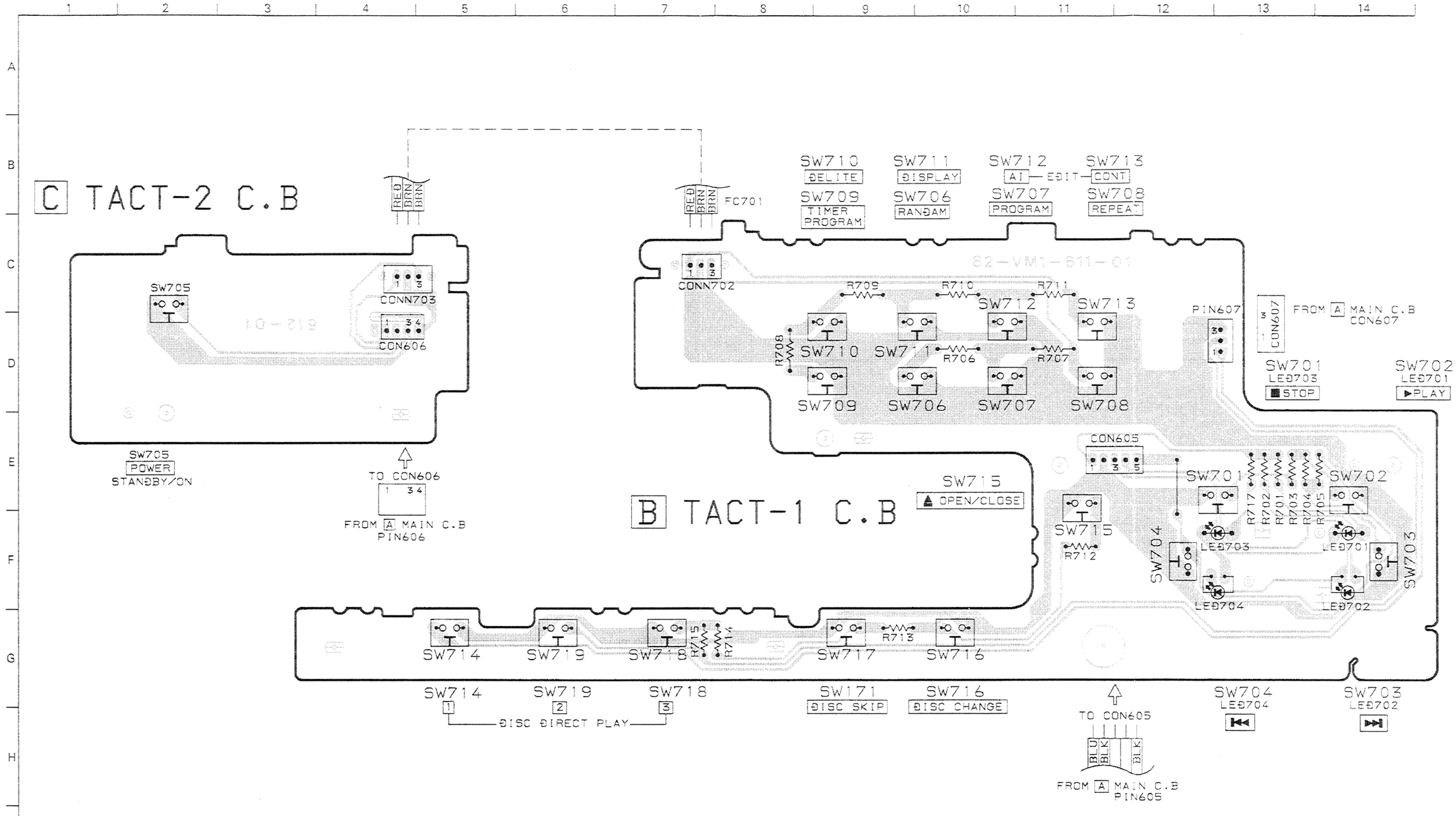
GRID ASSIGNMENT

FL101 7BT – 171GK



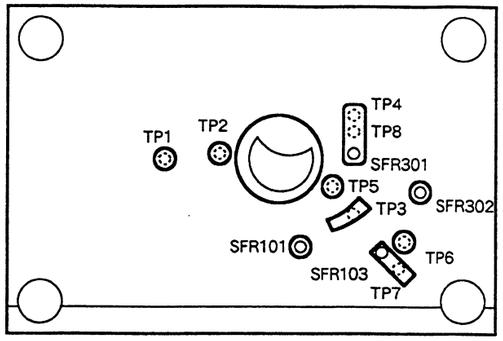
ANODE CONNECTION

	7G	6G	5G	4G	3G	2G	1G
P1	i	o	**OVER**	1a	1a	1a	**1**
P2	j	l	**B**	1b	1b	1b	**2**
P3	d	d	**ALL S**	1c	1c	1c	**6**
P4	b	e	**1**	1d	1d	1d	**8**
P5	a	a	**DISC**	1e	1e	1e	**7**
P6	l	n	**EDIT**	1f	1f	1f	**4**
P7	m	k	**BLANK**	1g	1g	1g	**5**
P8	k	m	**A**	1h	S2	—	**3**
P9	c	f	▶	2a	2a	2a	**9**
P10	u	b	**II**	2b	2b	2b	**10**
P11	h	p	—	2c	2c	2c	**14**
P12	f	—	—	2d	2d	2d	**17**
P13	t	h	—	2e	2e	2e	**16**
P14	o	j	**RANDOM**	2f	2f	2f	**12**
P15	v	g	**REPEAT**	2g	2g	2g	**13**
P16	n	c	**PROGRAM**	2h	S3	2h	**11**
P17	e	l	—	2j	•(col)	—	**15**
P18	s	—	—	**TRACK**	**MIN**	**SEC**	**18**
P19	g	—	—	—	—	—	**19**
P20	r	—	—	—	—	—	**20**
P21	q	—	—	—	—	—	S1
P22	p	—	—	—	—	—	—
P23	—	—	**STANDBY**	—	—	—	—

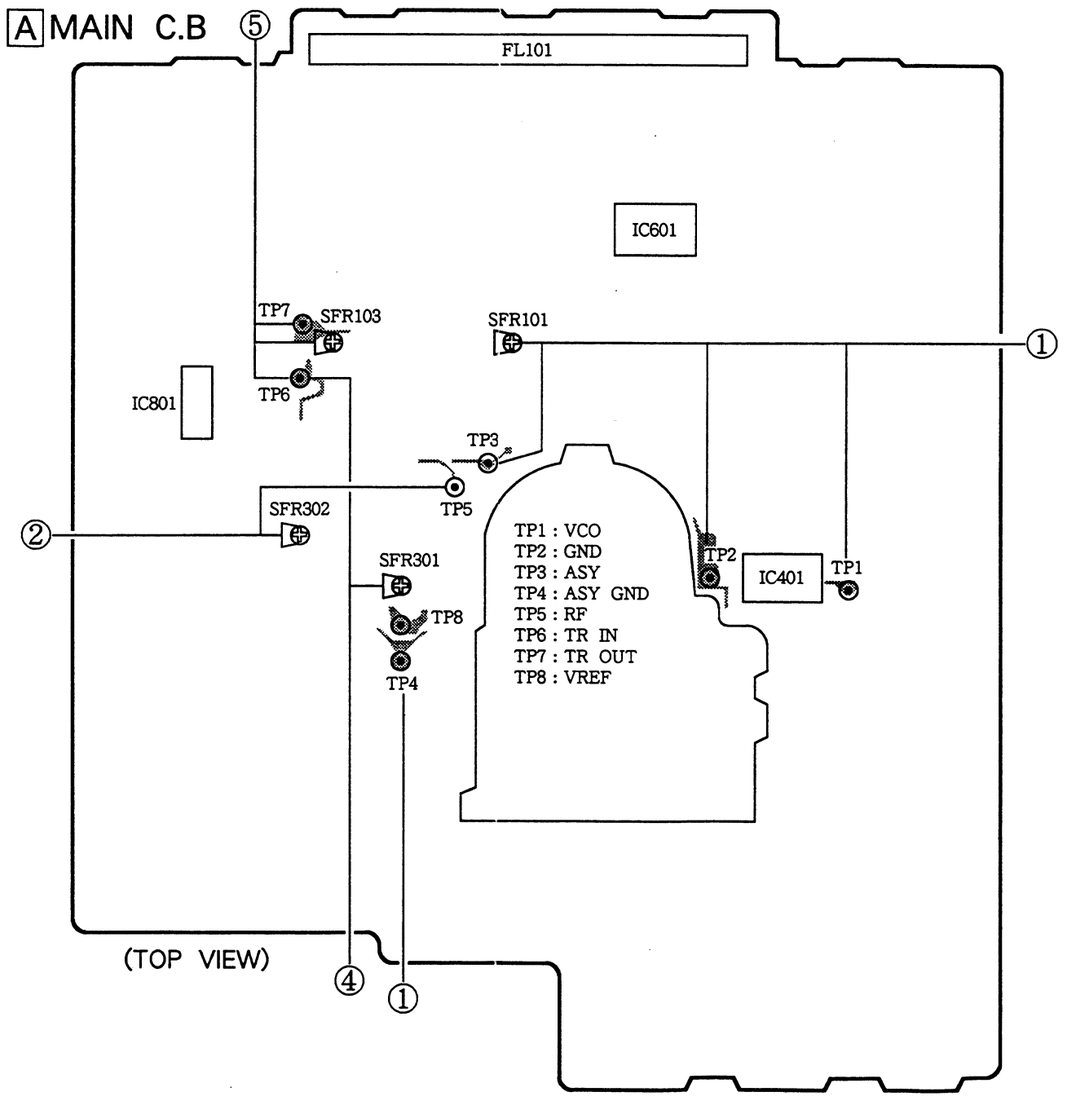

C TACT-2 C.B
RED
BRN
BRN
SW705
CONN703
CON606
SW705
POWER
STANDBY/ON
TO CON606
FROM A MAIN C.B
PIN606
FC701
SW710
DELITE
SW711
DISPLAY
SW712
AI — EDIT — CONT
SW713
SW709
TIMER PROGRAM
SW706
RANDAM
SW707
PROGRAM
SW708
REPEAT
82-VM1-611-01
CONN702
R709
R710
R711
SW712
SW713
PIN607
FROM A MAIN C.B
CON607
R708
SW710
SW711
R706
R707
SW709
SW706
SW707
SW708
SW701
LED703
STOP
SW702
LED701
PLAY
B TACT-1 C.B
SW715
OPEN/CLOSE
CON605
SW715
R712
SW701
SW702
R717
R702
R701
R703
R704
R705
LED703
LED701
SW704
SW703
LED704
LED702
SW714
SW719
SW718
R715
R714
SW717
R713
SW716
SW714
1
SW719
2
SW718
3
DISC DIRECT PLAY
SW171
DISC SKIP
SW716
DISC CHANGE
TO CON605
BLK
BLK
BLK
FROM A MAIN C.B
PIN605
SW704
LED704
SW703
LED702

ADJUSTMENT

The bottom of DX-Z950M has holes corresponding to the test points of the MAIN C.B.



(BOTTOM VIEW)



Note : • Connect a probe (10 : 1) of the frequency counter or the oscilloscope to a test point.
• Connect the ⊖ probe of the oscilloscope to TP8 (VREF) for each adjustment.

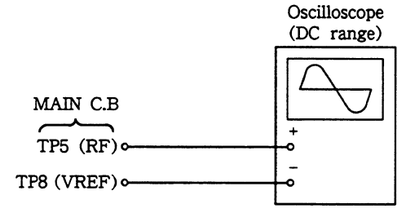
① VCO Frequency Adjustment

1. Connect and short between TP3 (ASY) and TP4 (ASY GND).
2. Connect the frequency counter to test points TP1 (VCO) and TP2 (GND).
3. When the power is off, turn the power on by pressing the OPEN/CLOSE and STOP/CLEAR keys at the same time. (All mode.)
4. Insert the disk and play it.
5. Adjust SFR101 (VCO) so that the frequency counter reading is 4.27 ± 0.02 MHz.
6. After the adjustment is completed, remove the short lead wires from TP3 (ASY) and TP4 (ASY GND).

Note : When releasing all lit up, disconnect the FG connecotor or turn the power off.

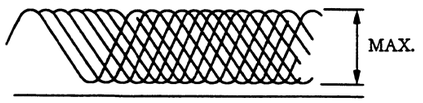
② Focus Bias Adjustment

Make the focus bias adjustment when replacing and repairing the optical block.



1. Connect an oscilloscope to test points TP5 (RF) and TP8 (VREF).
2. Turn on the power switch.
3. Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4. Adjust SFR302 (F.B) so that the amplitude of waveform on the oscilloscope is maximized.

RF signal waveform



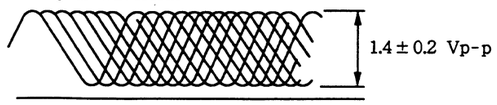
VOLT/DIV : 50 mV
TIME/DIV : 0.5 μS

③ RF Waveform Check

This check should be performed whenever the optical system block is replaced in repair.

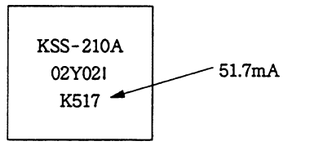
1. Connect an oscilloscope to test points TP5 (RF) and TP8 (VREF).
2. Turn on the power switch.
3. Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4. Check that the waveform appears as shown in the figure below.

RF signal waveform



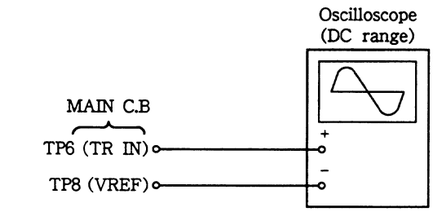
VOLT/DIV : 50 mV
TIME/DIV : 0.5 μS

Note : The current of the laser signal can be checked with the voltages on both sides of R312 (10Ω). The difference for the specified value shown on the label must be within ± 6.0mA.

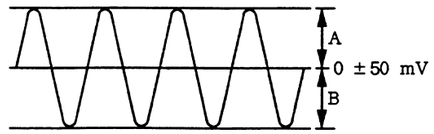


$$\text{Laser current } Iop = \frac{\text{Voltage across R312}}{10\,\Omega}$$

④ Tracking Balance Adjustment



1. Set SFR103 (TG) to minimum.
2. Connect an oscilloscope to test points TP6 (TRIN) and TP8 (VREF).
3. Turn on the power switch.
4. Insert test disc TCD-782 (YEDS-18) and press the PLAY (▶) button.
5. Press the FF key repeatedly.
6. Adjust SFR301 (TB) so that the waveform on the oscilloscope is vertically symmetrical as shown in the figure below.
7. After the adjustment is completed, remove the ground lead wires from the terminals.



A = B

VOLT/DIV : 50 mV
TIME/DIV : 1 mS

⑤ Tracking Gain Adjustment

A servo analyzer is necessary in order to perform this adjustment exactly. However, this gain has a margin, so even if it is slightly off, there is no problem. Therfore, do not perform this adjustment. Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechinical shock when 2-axis device operates. However,as these gains are reciprocated, the adjustment is performed so that both gains are satisfied.

- When gain is raised, the noise increases when the 2-axis device opearates.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.

When the gain adjustment is not satisfied, tye symptoms below appear.

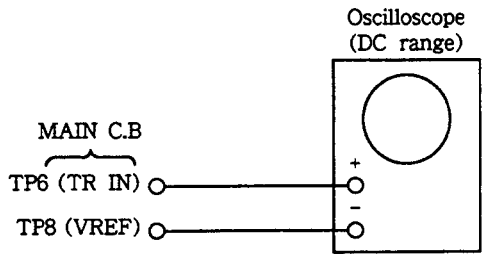
Gain / Symptoms	(Focus)	Tracking
● The time until music starts becomes longer for STOP→▶ PLAY or automatic selection (⏮ ⏭ buttons pressed.) (Normally takes about 2 seconds.)	low	low or high
● Music does not start and disc continues to rotate for STOP →▶ PLAY or automatic selection (⏮ ⏭ buttons pressed.)	–	low
● Disc stops to rotate shortly after STOP→▶ PLAY.	low or high	–
● Sound is interrupted during PLAY. Or time counter display stops.	–	low
● More noises during the 2-axis device operation.	high	high

The following is simple adjustment method.

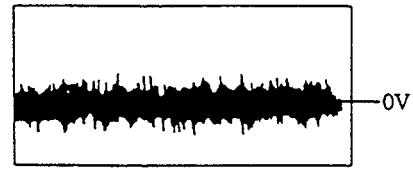
– Simple adjustment –

Note : Since the adjustment cannot be performed exactly, remember the positions of the controls before the adjustment and compare the adjusted position and the original position.
If the difference is a little, return the control to the original position.

Procedure :



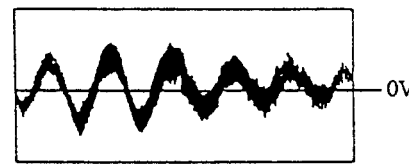
1. Keep the set horizontal. (If the set is not kept horizontally, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2. Insert test disc TCD-782 (YEDS-18) and play back the second composition.
3. Connect an oscilloscope to TP6 (TR IN) of the main board.
4. Adjust SFR103 (TG) so that the waveform appears as shown in the figure below.(tracking gain adjustment)



VOLT/DIV : 50 mV
TIME/DIV : 1 mS

- Incorrect example (The fundamental wave appears as compared with the waveform adjusted.)

Low tracking gain



VOLT/DIV : 50 mV
TIME/DIV : 1 mS

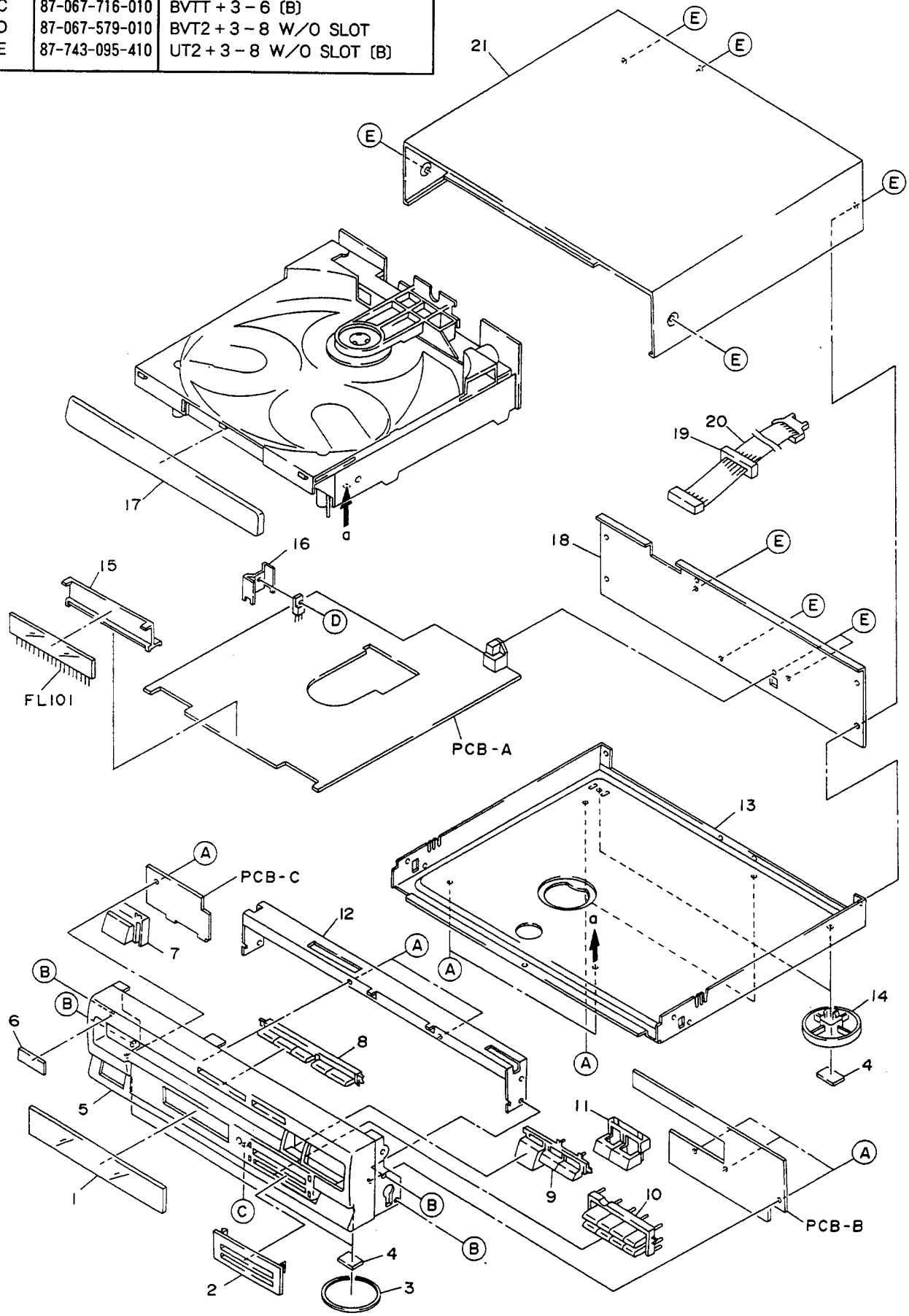
High tracking gain

The frequency of the fundamental wave is higher than that in low gain.

VOLT/DIV : 50 mV
TIME/DIV : 1 mS

EXPLODED VIEW – 1

REF. NO.	PART NO.	DESCRIPTION
A	87-067-703-010	BVT2 + 3 – 10 W/O SLOT
B	87-591-094-410	QIT + 3 – 6
C	87-067-716-010	BVTT + 3 – 6 (B)
D	87-067-579-010	BVT2 + 3 – 8 W/O SLOT
E	87-743-095-410	UT2 + 3 – 8 W/O SLOT (B)

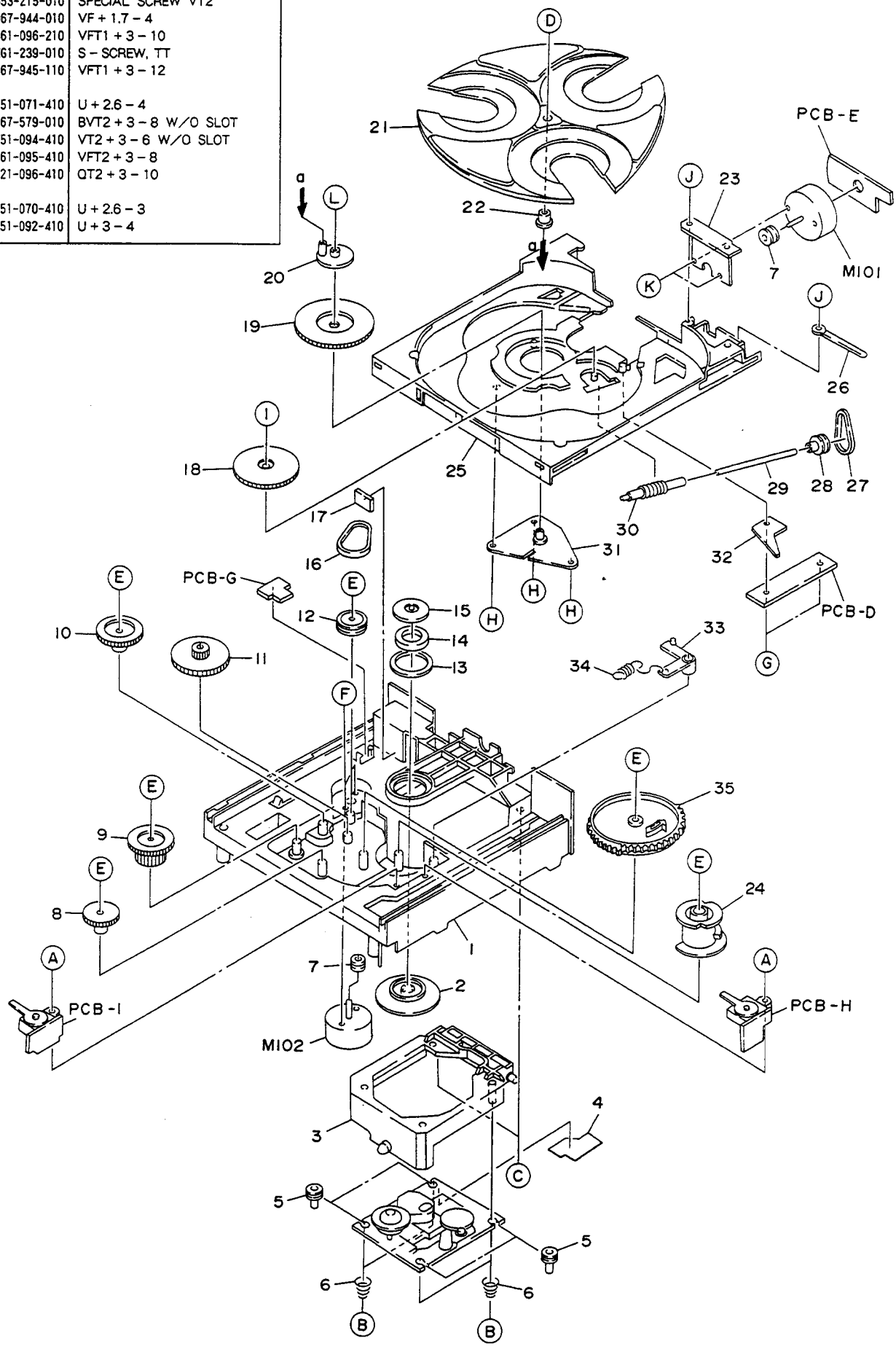


MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	1-1	★82-VM1-011-010	WINDOW	※	1
	1-2	★82-VM1-012-010	PANEL, PROGRAM	※	1
	1-3	★81-VW1-015-010	RING, FOOT		2
	1-4	★81-VW1-201-010	FELT 20 - 15 - 2		4
	1-5	★82-VM1-001-010	CABINET, FRONT	※	1
	1-6	★81-DS1-011-019	BADGE, AIWA		1
	1-7	★82-VM1-007-010	KEY, POWER	※	1
	1-8	★82-VM1-006-010	KEY, DISC	※	1
	1-9	★82-VM1-005-010	KEY, SEARCH	※	1
	1-10	★82-VM1-008-010	KEY, PROGRAM	※	1
	1-11	★82-VM1-004-010	KEY, PLAY	※	1
	1-12	---	CHASSIS, FRONT		1
	1-13	---	CHASSIS, MAIN		1
	1-14	★81-VX1-012-019	FOOT, REAR		2
	1-15	★81-VM1-203-010	GUIDE, FL		1
	1-16	---	HEAT SINK		1
	1-17	★82-VM1-010-010	PANEL, TRAY	※	1
	1-18	★82-VM1-009-010	PANEL, REAR (Y)	※	1
	1-18	★82-VM1-015-110	PANEL, REAR (YNE)	※	1
	1-19	★89-VT5-202-010	BUSHING, CORD		1
	1-20	★89-VX5-618-010	FLAT CABLE 11P FG		1
	1-21	★82-VM1-002-010	CABINET, STEEL (Y)	※	1
	1-21	★82-VM1-021-018	CABINET, STEEL (YNE)	※	1

EXPLODED VIEW – 2

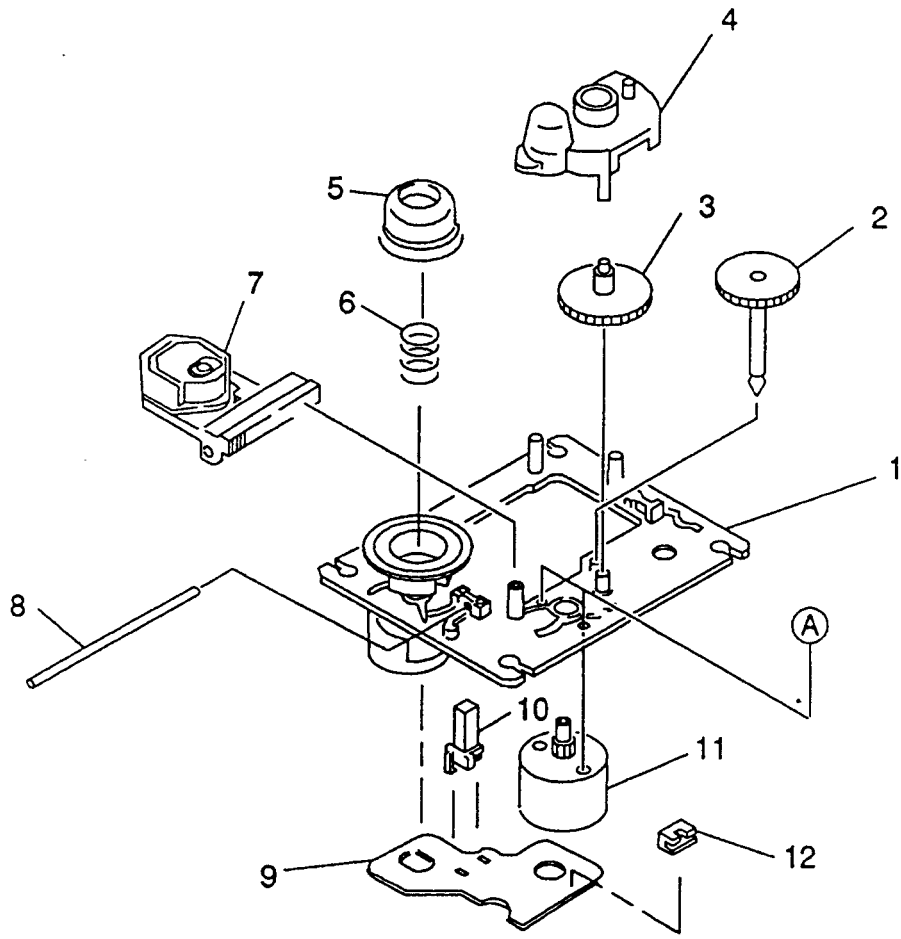
REF. NO.	PART NO.	DESCRIPTION
A	81-653-215-010	SPECIAL SCREW VT2
B	87-067-944-010	VF + 1.7 – 4
C	87-561-096-210	VFT1 + 3 – 10
D	81-Z61-239-010	S – SCREW, TT
E	87-067-945-110	VFT1 + 3 – 12
F	87-251-071-410	U + 2.6 – 4
G	87-067-579-010	BVT2 + 3 – 8 W/O SLOT
H	87-751-094-410	VT2 + 3 – 6 W/O SLOT
I	87-761-095-410	VFT2 + 3 – 8
J	87-721-096-410	QT2 + 3 – 10
K	87-251-070-410	U + 2.6 – 3
L	87-251-092-410	U + 3 – 4



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	2-1	★81-ZG1-201-010	CHASSIS, MECHANISM		1
	2-2	★81-ZG1-228-010	HOLDER, MAGNET		1
	2-3	★81-ZG1-226-010	MECHANISM HOLDER ASSY		1
	2-4	★81-ZG1-241-010	SHEET, CD MECHANISM		1
	2-5	★81-ZG1-230-010	G – CUSHION, MECHANISM		4
	2-6	★81-ZG1-231-010	C – SPRING, MECHANISM		4
	2-7	★81-ZG1-212-010	PULLEY, LOADING MOTOR		2
	2-8	★81-ZG1-209-010	GEAR, TRAY RELAY		1
	2-9	★81-ZG1-208-010	GEAR, TRAY B		1
	2-10	★81-ZG1-207-010	GEAR, TRAY A		1
	2-11	★81-ZG1-210-010	GEAR, RELAY		1
	2-12	★81-ZG1-211-010	PULLEY, RELAY		1
	2-13	★81-ZG1-242-010	SHEET, MAGNET		1
	2-14	★86-531-219-010	MAGNET, CLAMPER		1
	2-15	★81-ZG1-229-010	PLATE, MAGNET		1
	2-16	★81-ZG1-232-010	BELT, TRAY		1
	2-17	★81-ZG1-238-010	CUSHION, TRAY IN		1
	2-18	★81-ZG1-222-010	WORM WHEEL, TT		1
	2-19	★81-ZG1-202-010	GEAR, MAIN		1
	2-20	★81-ZG1-224-010	TT LEVER ASSY		1
	2-21	★81-ZG1-002-010	TURNTABLE		1
	2-22	★81-ZG1-219-010	SHAFT, TRAY		1
	2-23	★81-ZG1-215-010	HOLDER, MOTOR		1
	2-24	★81-ZG1-206-010	GEAR, MECHANISM CAM		1
	2-25	★81-ZG1-001-010	TRAY		1
	2-26	---	BINDER, WIRE		1
	2-27	★81-ZG1-233-110	BELT, TT		1
	2-28	★81-ZG1-236-010	PULLEY, TT MOTOR		1
	2-29	★81-ZG1-216-010	SHAFT, WORM		1
	2-30	★81-ZG1-221-010	WORM GEAR, TT		1
	2-31	★81-ZG1-225-010	TRAY PLATE ASSY		1
	2-32	★81-ZG1-240-010	P – SPRING, WORM		1
	2-33	★81-ZG1-213-010	PLATE, CAM		1
	2-34	★81-ZG1-235-010	E – SPRING, CAM		1
	2-35	★81-ZG1-205-110	GEAR, TRAY CAM		1

EXPLODED VIEW – 3

REF. NO	PART NO.	DESCRIPTION
A	87-261-032-210	V+ 2-3



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
	3-1	★9X-262-513-310	TT CHASSIS ASSY (W/MOTOR)		1
	3-2	★92-625-188-020	GEAR, A		1
	3-3	- - -	GEAR, B		1
	3-4	★92-625-544-010	COVER		1
	3-5	92-625-187-010	RING, CENTER		1
	3-6	★92-625-191-010	SPRING, COMPRESSION		1
	3-7	98-848-127-110	PICK UP KSS-210A		1
	3-8	★94-917-565-010	SHAFT, SLED		1
	3-9	- - -	MOTOR PWB		1
	3-10	91-572-085-110	SWITCH, LEAF (LIMIT)		1
	3-11	★9X-262-513-210	SLED MOTOR ASSY		1
	3-12	★91-564-722-110	CONNECTOR 6P		1